

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460

100	1686
100-	1000

EPA Reg. Number:

TaffrailTM

Date of Issuance:

9/10/21

NOTICE OF PESTICIDE: X Registration	Term of Issuance:	
Reregistration	Unconditional	
(under FIFRA, as amended)	Name of Pesticide Produ	ct:

Name and Address of Registrant (include ZIP Code):

Nestor Algarin Regulatory Product Manager Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, NC 27419-8300

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:	Date:
Cynthia Giles-Parker, Chief Fungicide Branch, Registration Division (7505P)	9/10/21

EPA Form 8570-6

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- 2. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 100-1686."
- 3. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 12/18/2020
- Alt 1 CSF dated 12/18/2020

If you have any questions, please contact Elisha Graham by phone at via email at graham.elisha@epa.gov

Enclosure – stamped "accepted" label

MANDIPROPAMID	GROUP	40	FUNGICIDE
DIFENOCONAZOLE	GROUP	3	FUNGICIDE

Taffrail

Fungicide

Active Ingredients: Mandipropamid (CAS No. 374726-62-2)......21.9% Difenoconazole (CAS No.119446-68-3)......21.9% Other Ingredients: 56.2% Total: 100.0%

Taffrail is formulated as a suspension concentrate (SC).

Contains 2.08 pounds of mandipropamid active ingredient and 2.08 pounds of difenoconazole active ingredient per gallon

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg.	100-XXXX
EPA Est.	

Net Contents

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Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100-1686

FIRST AID					
If swallowed	• Call a poison control center or doctor immediately for treatment advice.				
	Have person sip a glass of water if able to swallow.				
	Do not induce vomiting unless told to by a poison control center or doctor.				
 Do not give anything by mouth to an unconscious person. 					
Have the product	Have the product container or label with you when calling a poison control center or doctor, or				
going for treatmen	ıt.				
	HOT LINE NUMBER				
	r 24-Hour Medical Emergency Assistance (Human or Animal)				
Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident)					
Call					
	1-800-888-8372				

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of: Barrier laminate, Butyl rubber ≥ 14 mils,
 Nitrile rubber ≥ 14 mils, Neoprene rubber ≥ 14 mils, Polyvinyl Chloride (PVC) ≥ 14 mils, or Viton ® ≥ 14 mils.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

This pesticide is toxic to fish, mammals, and aquatic invertebrates. Drift and runoff may be hazardous to aquatic **estuarine/marine** organisms in water adjacent to treated area.

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or regional office of the EPA.

Groundwater Advisory

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow groundwater. This product has a potential for runoff for several months or more after application. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this products' potential to reach surface water.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves made of: Barrier laminate, Butyl rubber ≥ 14 mils, Nitrile rubber ≥ 14 mils, Neoprene rubber ≥ 14 mils, Polyvinyl Chloride (PVC) ≥ 14 mils, or Viton ® ≥ 14 mils.
- Shoes plus socks

PRODUCT USE PRECAUTIONS

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

PRODUCT INFORMATION

Taffrail is a broad spectrum product containing two fungicides. It has preventative, systemic and curative properties and is recommended for the control of many important plant diseases. Taffrail provides excellent disease control of many leaf spots, powdery mildews, and downy mildews. Taffrail is applied as a foliar spray and can be used in block, alternating spray, or tank mix programs with other crop protection products. All applications must be made according to the use directions that follow.

PRODUCT USE INSTRUCTIONS

Application: Thorough coverage is necessary to provide good disease control. Mix only the amount of spray solution needed for immediate application. Avoid spray overlap, as crop injury may occur.

Adjuvants: A spreading/penetrating type adjuvant such as a non-ionic surfactant, crop oil concentrate, or blend is recommended at the manufacturer's recommended rates. When an adjuvant is to be used with this product, the use of an adjuvant that meets the standards of the Chemical Producers and Distributors Association (CPDA) adjuvant certification program is recommended.

Efficacy: Under certain conditions conducive to extended infection periods, use another registered fungicide for additional applications if maximum amount of Taffrail has been used. If fungal isolates that are resistant to Group 3 or Group 40 fungicides are present, efficacy may be reduced for certain diseases. The higher rates in the rate range and/or shorter spray intervals may be required under conditions of heavy infection pressure, highly susceptible varieties, or when environmental conditions conducive to disease exist.

Integrated Pest Management (IPM): Taffrail should be integrated into an overall disease and pest management strategy whenever the use of a fungicide is required. Cultural practices known to reduce disease development should be followed. Consult your local agricultural authorities for additional IPM strategies established for your area. Taffrail may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

Resistance Management:

For resistance management, please note that Taffrail contains both a Group 40 (mandipropamid), and group 3 (difenoconazole) fungicide. Any fungal population may contain individuals naturally resistant to either or both of the active ingredients in Taffrail and other Group 40 or Group 3 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of Taffrail or other Group 40 and Group 3 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.

- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM directions for specific crops and pathogens.
- For further information or to report suspected resistance contact Syngenta Crop Protection at 1-866-796-4368. You can also contact your university extension specialist to report resistance.

As part of a resistance management strategy:

- Apply a maximum of 4 sprays during one crop cycle
- Apply no more than 2 sequential applications unless otherwise stated in the crop section.
- When tank mixing or alternating, use an effective partner one that provides satisfactory disease control when used alone at the mixture rate.
- Do not use Taffrail for transplant production.

Rotational Crops: Please see table below for crop rotational restrictions:

Rotational Crop	Planting Time From Last Taffrail Application
Cucurbit vegetables	
Brassica (Cole) leafy vegetables	
Bulb vegetables	0 days
Tomatoes	·
Fruiting vegetables	
Potatoes	
Tuberous & corm vegetables	
Cereals (wheat, barley, triticale, oats, rye,	
milet and buckwheat)	
Chickpeas	30 days
Root and Tuber vegetables, Crop Group 1	
(except sugarbeet, and tuberous corm	
vegetable subgroup 1C)	
Soybean	
Strawberry	
All other crops intended for food and feed	60 days

Crop Tolerance: Plant tolerance has been found acceptable for all crops on the label; however, not all possible tank mix combinations have been tested under all conditions. When possible, it is recommended to test the combinations on a small portion of the crop to ensure a phytotoxic response will not occur as a result of application.

Spray Drift Management:

Mandatory Spray Drift Requirements

Aerial Applications:

- Do not release spray at a height greater than 10 ft above the vegetative canopy unless a greater application height is necessary for pilot safety.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Ground Boom Applications:

- Apply with the nozzle height recommended by the manufacturer, but no more than 3
 feet above the ground or crop canopy unless making a pasture or rangeland
 application, in which case applicators may apply with a nozzle height no more than 4
 feet above the ground.
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Boomless Ground Applications:

- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Spray Drift Advisories:

- THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.
- BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.
- DO NOT apply when conditions favor drift beyond the target area.
- The interaction of many equipment- and weather-related factors determines the potential for spray drift.
- DO NOT apply when the wind speed is greater than 10 mph or during periods of temperature inversions.
- DO NOT apply when weather conditions favor drift from treated areas to non-target aquatic habitat.

Importance of Droplet Size:

- An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control.
- While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom:

- Volume Increasing the spray volume so that larger droplets are produced will
 reduce spray drift. Use the highest practical spray volume for the application. If a
 greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure** Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle** Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size – Aircraft:

 Adjust Nozzles - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

Boom Height – Ground Boom:

 For ground equipment, the boom should remain level with the crop and have minimal bounce.

Release Height – Aircraft:

Higher release heights increase the potential for spray drift.

Shielded Sprayers:

- Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers.
- Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

Temperature and Humidity:

 When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

Temperature Inversions:

- Drift potential is high during a temperature inversion.
- Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.
- The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator.
- Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.
- Avoid applications during temperature inversions.

Wind:

- Drift potential generally increases with wind speed.
- AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.
- Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

Handheld Technology Applications:

· Take precautions to minimize spray drift.

MIXING AND APPLICATION METHODS

Spray Equipment

Nozzles

- Equip sprayers with nozzles that provide accurate and uniform application.
- Nozzles should be the same size and uniformly spaced across the boom.
- Calibrate sprayer before use.
- It is suggested that screens be used to protect the pump and to prevent nozzles from clogging.
- Screens placed on suction side of pump should be 16-mesh or coarser.
- Do not place a screen in the recirculation line.
- Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles.
- Check nozzle manufacturer's recommendations.

Pump

- Use a pump with capacity to:
 - (1) maintain 35-40 psi at nozzles
 - (2) provide sufficient agitation in tank to keep mixture in suspension this requires recirculation of 10% of tank volume per minute.
- Use a jet agitator or liquid sparge tube for agitation.
- Do not air sparge.

For more information on spray equipment and calibration, consult sprayer manufacturers' and state recommendations. For specific local directions and spray schedules, consult the current state agricultural recommendations.

Mixing Instructions

- Prepare no more spray mixture than is required for the immediate operation.
- Thoroughly clean spray equipment before using this product.
- Agitate the spray solution before and during application.
- Rinse spray tank thoroughly with clean water after each day's use and dispose of pesticide rinsate by application to an already treated area.
- Do not allow spray mixture to stand overnight or for prolonged periods of time (more than 3 hours) without agitation.
- It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations and directions for use on all product labels involved in tank mixing. User must follow the

most restrictive directions for use and precautionary statements of each product in the tank mixture.

Taffrail Alone (no tank mix):

- Add ½-¾ of the required amount of water to the spray or mixing tank.
- With the agitator running, add Taffrail to the tank.
- Continue agitation while adding the remainder of the water.
- Begin application of the spray solution after Taffrail has completely dispersed into the mix water.
- Maintain agitation until all of the mixture has been sprayed.

Tank Mix Precautions:

- All tank mixes should be pre-tested to determine physical compatibility between formulations.
- Follow the most restrictive precautions and limitations on the labeling of all products used in mixtures.
- It is the pesticide user's responsibility to ensure that all products are registered for
 the intended use. Read and follow the applicable restrictions and limitations and
 directions for use on all product labels involved in tank mixing. Users must follow the
 most restrictive directions for use and precautionary statements of each product in
 the tank mixture.

Taffrail + Tank Mixtures: Taffrail is usually compatible with all tank-mix partners. To determine the physical compatibility of Taffrail with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to 1 qt of water. Add wettable powders and water dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

It is important to mix only the amount of product that can be sprayed immediately. Continuous agitation is recommended. If circumstances cause a delay of more than 3 hours, the product(s) may settle and be difficult to re-suspend. If this occurs, good agitation is required for a minimum of 15 minutes before and during spray operation.

Mixing in the Spray Tank

- Add $\frac{1}{2}$ - $\frac{2}{3}$ of the required amount of water to the spray or mixing tank.
- With the agitator running, add the tank mix partner(s) into the tank in the same order as described above.
- Allow the material to completely dissolve and disperse into the mix water. Continue agitation while adding the remainder of the water and Taffrail to the spray tank.
- Allow Taffrail to completely disperse.
- Spray the mixture with the agitator running.

Application Instructions

Taffrail may be applied with all types of spray equipment commonly used for making ground and aerial applications. Proper adjustments and calibration of spraying equipment to give good canopy penetration and coverage is essential for good disease

control.

Ground Application:

- Apply in a minimum of 10 gal of water per acre, unless specified otherwise.
- Do not apply through any ultra-low volume (ULV) spray system.
- Thorough coverage is necessary to provide good disease control.

Aerial Application:

- Use only on crops where aerial applications are indicated.
- Thorough coverage is necessary to provide good disease control.
- Apply in a minimum of 5 gallons of water per acre unless specified otherwise.
- Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur.
- Do not apply directly to humans or animals.
- Do not apply through any ultra-low volume (ULV) spray system.

Application Through Irrigation Systems (Chemigation)

- Use only on crops for which chemigation is specified on this label.
- Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. Do not apply this product through any other type of irrigation system.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- Apply Taffrail use rates in 0.1 0.25 inches per acre. Excessive water may reduce efficacy.
- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Operating Instructions

- The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent watersource contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quickclosing check-valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended.

Center Pivot Irrigation Equipment

Notes: (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating Taffrail through center pivot systems because of non-uniform application.

- Determine the size of the area to be treated.
- Determine the time required to apply ¹/8-¹/2 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. When applying Taffrail through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution. Run the system at 80-95% of the manufacturer's rated capacity.
- Using water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of Taffrail required to treat the area covered by the irrigation system.
- Add the required amount of Taffrail and sufficient water to meet the injection time requirements to the solution tank.
- Make sure the system is fully charged with water before starting injection of the Taffrail solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- Maintain constant solution tank agitation during the injection period.
- Continue to operate the system until the Taffrail solution has cleared the sprinkler head.

Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

- Determine the acreage covered by the sprinklers.
- Fill injector solution tank with water and adjust flow rate to use the contents over a 20- to 30-minute interval. When applying Taffrail through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution.

- Determine the amount of Taffrail required to treat the area covered by the irrigation system.
- Add the required amount of Taffrail into the same quantity of water used to calibrate the injection period.
- Operate the system at the same pressure and time interval established during the calibration.
- Stop injection equipment after treatment is completed. Continue to operate the system until the Taffrail solution has cleared the last sprinkler head.

SPECIFIC INSTRUCTIONS FOR PUBLIC WATER SYSTEMS

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. The pesticide injection pipeline must contain a functional, automatic, quickclosing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

SPECIFIC DIRECTIONS FOR USE

Сгор	Target Disease	Use Rate fl oz Product per Acre	Remarks
Brassica (Cole) Leafy Vegetables Broccoli Brussels sprouts Cabbage Cauliflower Collards Kale Mustard greens See additional crops below. Including all cultivars and/or hybrids of these.	Alternaria diseases (Alternaria spp.) Anthracnose (Colletotrichum higginsianum) Cercospora leaf spot (C. brassicicola) Powdery mildew (Erysiphe polygoni) Downy mildew (Peronospora parasitica)	5.5 – 7.0	Begin applications prior to disease onset when conditions are conducive for disease. Apply Taffrail on a 7-10 day schedule making no more than 2 sequential applications before alternating to another fungicide with a different mode of action. [1. Optional language if label has a rate range and a single interval: If disease pressure is high, use the highest rate.] [2. Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.] [3. Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.] The addition of a spreading/penetrating type adjuvant such as a non-ionic surfactant or crop oil concentrate or blend is
			recommended when applying by ground or air.

Application: For best results, sufficient water volume must be used to provide thorough coverage. Taffrail can be applied by either ground, chemigation, or aerial application. A minimum of 15 gal/A for ground applications is recommended. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

Complete list of brassica leafy vegetables: Broccoli; broccoli, Chinese (gai lon); broccoli raab (rapini); Brussels sprouts; cabbage; cabbage, Chinese (bok choy); cabbage, Chinese (napa); cabbage, Chinese mustard (gai choy); cauliflower; cavalo broccolo; collards; kale; kohlrabi; mizuna; mustard greens; mustard spinach; rape greens.

- 1) Do not apply more than 28 fl oz/A of Taffrail per crop per season.
- 2) Do not apply more than 0.46 lb ai/A per season of difenoconazole-containing products.
- 3) Do not apply more than 0.52 lb ai/A per season of mandipropamid-containing products.
- 4) Do not apply within 1 day of harvest (1-day PHI).

Crop	Target Disease	Use Rate fl oz Product per Acre	Remarks
Bulb Vegetables Onion, bulb Garlic Shallot Onion, green Leek Welch onion	Cercospora leaf spot (C. duddiae) Leaf blotch (Cladosporium alliicepae) Powdery mildew (Leveillula taurica) Purple blotch (Alternaria porri) Stemphyllium leaf blight (S. vesicarium) Downy mildew (Peronospora destructor)	5.5 – 7.0	Begin applications prior to disease onset when conditions are conducive for disease. Apply Taffrail on a 7-10 day schedule making no more than 2 sequential applications before alternating to another fungicide with a different mode of action. [1. Optional language if label has a rate range and a single interval: If disease pressure is high, use the highest rate.] [2. Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.] [3. Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.] The addition of a spreading/penetrating type adjuvant such as a non-ionic surfactant or crop oil concentrate or blend is recommended when applying by ground or air.

Application: For best results, sufficient water volume must be used to provide thorough coverage. Taffrail can be applied by either ground, chemigation, or aerial application. A minimum of 15 gal/A for ground applications is recommended. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

Complete list of bulb vegetables: Chive, fresh leaves; chive, Chinese, fresh leaves; daylily, bulb; elegans hosta; fritillaria, bulb; fritillaria, leaves; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; kurrat; lady's leek; leek, wild; lily, bulb; onion, Beltsville bunching; onion, bulb; onion, Chinese, bulb; onion, fresh; onion, green; onion, macrostem; onion, pearl; onion, potato, bulb; onion, tree, tops; onion, Welsh, tops; shallot, bulb; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these.

- 1) For green onions, do not apply more than 21 fl oz/A of Taffrail per crop per season.
- 2) For green onions, do not apply more than 0.34 lb ai/A per season of difenoconazole or 0.52 lb ai/A of mandipropamid-containing products per season.
- 3) For dry bulb onions, do not apply more than 28 fl oz/A of Taffrail per crop per season.
- 4) For dry bulb onions, do not apply more than 0.46 lb ai/A per season of difenonconazole or 0.52 lb ai/A of mandipropamid-containing products per season.
- 5) Do not apply within 7 days of harvest (7-day PHI).

Crop	Target Disease	Use Rate fl oz Product per Acre	Remarks
Cucurbit Vegetables Cantaloupe Cucumber Honeydew Muskmelon Watermelon Pumpkin Squash Zucchini Including cultivars and/or hybrids of these. See additional cucurbit crops below.	Powdery mildew (Sphaerotheca fuliginea, Erysiphe cichoracearum) Alternaria leaf blight (A. cucumerina) Alternaria leaf spot (A. alternata) Anthracnose (Colletotrichum orbiculare) Cercospora leaf spot (C. citrullina) Gummy stem blight (Didymella bryoniae) Septoria leaf blight (S. cucurbitacearum) Plectosporium blight (P. tabacinum) For Suppression of: Downy mildew (Pseudoperonospora cubensis)	5.5 – 7.0	Begin applications prior to disease onset when conditions are conducive for disease. Apply Taffrail on a 7-10 day schedule making no more than 1 application before alternating to another fungicide with a different mode of action. For downy mildew control, Taffrail must be tank mixed with another fungicide labeled for downy mildew that has a different mode of action. [1. Optional language if label has a rate range and a single interval: If disease pressure is high, use the highest rate.] [2. Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.] [3. Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.] The addition of a spreading/penetrating type adjuvant such as a non-ionic surfactant or crop oil concentrate or blend is recommended when applying by ground or air.

Application: For best results, sufficient water volume must be used to provide thorough coverage. Taffrail can be applied by either ground, chemigation, or aerial application. A minimum of 15 gal/A for ground applications is recommended (20 for gummy stem blight). For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

Complete list of cucurbit vegetables: Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes cantaloupe); pumpkin; squash, summer; squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon.

- 1) Do not apply more than 28 fl oz/A of Taffrail per crop per season.
- 2) Do not apply more than 0.46 lb ai/A per season of difenoconazole-containing products.
- 3) Do not apply more than 0.52 lb ai/A per season of mandipropamid-containing products.
- 4) Do not apply within 0 days of harvest (0-day PHI).

Crop	Target Disease	Use Rate fl oz Product per Acre	Remarks
Grapes (except Concord, Concord Seedless, and Thomcord. See Precaution under Remarks.)	Alternaria rot (A. alternata) Powdery mildew (Uncinula necator) Rotbrenner (Pseudopezicula tracheiphila) Septoria leaf spot (S. ampelina) Phomopsis cane and leaf spot (P. viticola) Black rot (Guignarda bidwellii) Angular leaf spot (Mycosphearella angulata) Anthracnose (Elsinoe ampelina) Leaf blight (Pseudocercospora vitis) Downy mildew (Plasmopara viticola)	5.5 – 7.0	For powdery mildew, begin at bud break and apply on a 10-21 day interval, making no more than 2 sequential applications before alternating to a fungicide with a different mode of action. For Phomopsis diseases, apply at bud break, before shoots are 0.5 inches in length, and then again when shoots are 5-6 inches in length. For black rot, begin when shoot length is 1-3 inches and continue on a 10-day interval. For all other diseases, begin applications prior to disease onset when conditions are conducive for disease. Apply Taffrail on a 10-14 day schedule making no more than 2 sequential applications before alternating to another fungicide with a different mode of action. [1. Optional language if label has a rate range and a single interval: If disease pressure is high, use the highest rate.] [2. Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.] [3. Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.] The addition of a spreading/penetrating type adjuvant such as a non-ionic surfactant or crop oil concentrate or blend is recommended when applying by ground or air. PRECAUTION: On V. labrusca, V. labrusca hybrids, and other non-viniferea hybrids where sensitivity is not known-the use of Taffrail by itself or in tank mixtures with materials that may increase uptake (adjuvants, foliar fertilizers) may result in leaf burning or other phytotoxic effects.

Application: For best results, sufficient water volume must be used to provide thorough coverage. Taffrail can be applied by either ground or aerial application. A minimum of 15 gal/A for ground applications is recommended. For aerial applications a minimum of 10 gal/A of water is recommended.

Specific Use Restrictions:

- 1) Do not apply more than 28 fl oz/A of Taffrail per crop per season.
- 2) Do not apply more than 0.46 lb ai/A per season of difenoconazole-containing products.
- 3) Do not apply more than 0.52 lb ai/A per season of mandipropamid-containing products.
- 4) Do not apply within 14 days of harvest (14-day PHI).

Crop	Target Disease	Use Rate fl oz Product per Acre	Remarks
Peppers and other Fruiting Vegetables:	Anthracnose Colletotrichum spp.)	5.5 - 7.0	Begin applications prior to disease development and continue throughout the season on a 7-10 day interval. Make no more than 2 consecutive applications before
Peppers Bell pepper Non-bell pepper	Cercospora leafspot (C. capsici)		switching to another effective fungicide with a different mode of action.
Sweet non-bell Eggplant	Downy mildew (<i>Peronospora</i>		[1. Optional language if label has a rate range and a single interval: If disease pressure is high, use the highest rate.]
Groundcherry Pepino	tabacina) Gray leafspot		[2. Optional language if label has a single rate and interval range: If disease pressure
See TOMATOES section for specific directions.	(Stemphyllium solani) Powdery mildew		is high, use the shortest interval.] [3. Optional language if label has a rate range and interval range: If disease pressure
	(Oidiopsis sicula)		is high, use the shortest interval and highest rate.]
			The addition of a spreading/penetrating type adjuvant such as a non-ionic surfactant or crop oil concentrate or blend is recommended.

Application: For best results, use sufficient water volume to provide thorough coverage. Taffrail may be applied by ground, chemigation, or aerial application. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

- 1) Do not apply more than 28 fl oz/A per season of Taffrail.
- 2) Do not apply more than 0.52 lb ai/A per season of mandipropamid-containing products.
- 3) Do not apply more than 0.46 lb ai/A per season of difenoconazole-containing products.
- 4) Do not apply within 1 day of harvest (1-day PHI).

Crop	Target Disease	Use Rate fl oz Product per Acre	Remarks
Potatoes	Black dot (Colletotrichum coccodes) Brown spot (Alternaria alternata) Early blight (Alternaria solani) Late blight (Phytophthora infestans) Powdery mildew (Erysiphe cichoracearum) Septoria leafspot (S. lycopersici)	5.5 - 7.0	Begin applications prior to disease development and continue throughout the season on a 7-10 day interval. Make no more than 2 consecutive applications before switching to another effective fungicide with a different mode of action. [1. Optional language if label has a rate range and a single interval: If disease pressure is high, use the highest rate.] [2. Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.] [3. Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.] The addition of a spreading/penetrating type adjuvant such as a non-ionic surfactant or crop oil concentrate or blend is recommended when applying by ground or air.

Application: For best results, use sufficient water volume to provide thorough coverage. Taffrail may be applied by ground, chemigation, or aerial application. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

- 1) Do not apply more than 28 fl oz/A per season of Taffrail.
- 2) Do not apply more than 0.52 lb ai/A per season of mandipropamid-containing products
- 3) Do not apply more than 0.46 lb ai/A per season of difenoconazole-containing products.
- 4) Do not apply within 14 days of harvest (14-day PHI).

Crop	Target Disease	Use Rate fl oz Product per Acre	Remarks
Tomatoes Tomatillo	Anthracnose (Colletotrichum spp.) Black mold (A. alternata) Early blight (Alternaria solani) Gray leafspot (Stemphylium botryosum) Late blight (Phytophthora infestans) Leaf mold (Fulvia fulva) Powdery mildew (Leveillula taurica) Septoria leafspot (S. lycopersici) Target spot (Corynespora cassiicola)	5.5 – 7.0	Begin applications prior to disease development and continue throughout the season on a 7-10 day interval. Make no more than 2 consecutive applications before switching to another effective fungicide with a different mode of action. [1. Optional language if label has a rate range and a single interval: If disease pressure is high, use the highest rate.] [2. Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.] [3. Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.] The addition of a spreading/penetrating type adjuvant such as a non-ionic surfactant or crop oil concentrate or blend is recommended when applying by ground or air.

Application: For best results, use sufficient water volume to provide thorough coverage. Taffrail may be applied by ground, chemigation, or aerial application. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

- 1) Do not apply more than 28 fl oz/A per season of Taffrail.
- 2) Do not apply more than 0.52 lb ai/A per season of mandipropamid-containing products.
- 3) Do not apply more than 0.46 lb ai/A per season of difenoconazole-containing products.
- 4) Do not apply within 1 day of harvest (1-day PHI).

Сгор	Target Disease	Use Rate fl oz Product per Acre	Remarks
Vegetables, tuberous and corm, subgroup	Black dot (Colletotrichum coccodes)	5.5 - 7.0	Begin applications prior to disease development and continue throughout the season on a 7-10 day interval. Make no more than 2 consecutive applications before
See additional crops below.	Brown spot (Alternaria alternata)		switching to another effective fungicide with a different mode of action.
Including all cultivars and/or hybrids of these.	Early blight (Alternaria spp.)		[1. Optional language if label has a rate range and a single interval: If disease pressure is high, use the highest rate.]
See POTATOES for specific use directions.	Late blight (<i>Phytophthora</i> <i>infestans</i>)		[2. Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
	Powdery mildew (Erysiphe cichoracearum)		[3. Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.]
	Septoria leafspot (Septoria spp.)		The addition of a spreading/penetrating type adjuvant such as a non-ionic surfactant or crop oil concentrate or blend is recommended when applying by ground or air.

Application: For best results, use sufficient water volume to provide thorough coverage. Taffrail may be applied by ground, chemigation, or aerial application. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

Complete list of vegetables, tuberous and corm, subgroup: Arracacha, arrowroot, artichoke (Chinese and Jerusalem), burdock, canna, cassava (bitter and sweet), chayote (root), chufa, dasheen (taro), ginger, leren, sweet potato, tanier, tumeric, yam (bean and true).

- 1) Do not apply more than 28 fl oz/A per season of Taffrail.
- 2) Do not apply more than 0.52 lb ai/A per season of mandipropamid-containing products.
- 3) Do not apply more than 0.46 lb ai/A per season of difenoconazole-containing products.
- 4) Do not apply within 14 days of harvest (14-day PHI).

Product Conversion Table

FI Oz Taffrail/Acre	Lb Al Mandipropamid	Lb Al Difenoconazole
5.5	0.089	0.089
6.0	0.098	0.098
6.5	0.106	0.106
7.0	0.114	0.114

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage

Store in original container only. Store in a cool, dry and well-ventilated place. Protect from excessive heat. Keep container closed when not in use. Do not store near food or feed.

Pesticide Disposal

Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Handling [less than or equal to 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration.

Container Handling [Bulk/Mini-Bulk]

Refillable container. Refill this container with pesticide only. Do not reuse the container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water.

Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

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Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

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